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IN THE CLAIMS

Please amend the claims as follows:

1. Cancelled.
2. Cancelled.
3. Cancelled.
4. Cancelled.
5. Cancelled.
6. Cancelled.
7. Cancelled.
- 8.-21. Previously cancelled.
22. Cancelled.
23. Cancelled.
24. Cancelled.
25. Cancelled.
26. Cancelled.
27. Cancelled.
28. Cancelled.
29. Cancelled.
30. Cancelled.
31. Cancelled.
32. Cancelled.
33. Cancelled.
34. Cancelled.
35. Cancelled.

36. (Amended) A method for diagnosis of blood brain barrier permeability in a subject comprising:

detecting a first elevated level of S100 β in the blood of a patient;
identifying a second elevated level of S100 β in the blood of the patient; and
comparing first and second elevated levels of S100 β wherein a statistically relevant first level of S100 β protein is indicative of blood brain barrier permeability without neuronal damage and a second elevated level of S100 β is indicative of neuronal damage.

37. The method of claim 36, wherein the second elevated level of S100 β has a value which is greater than said value of first elevated level of S100 β .

38. Cancelled

39. Cancelled.

40. Cancelled.

41. (Previously Presented) The method of claim 36, wherein said value of said second elevated level of S100 β is greater than twice the value of said first elevated level of S100 β .

42. (Previously Presented) The method of claim 36, wherein said value of said first elevated level of S100 β is in the range of about 0.12 ng/ml to 0.35 ng/ml.

43. (Previously Presented) The method of claim 36, wherein said value of said second elevated level of S100 β is in the range of about 0.35 ng/ml.

44. (New) A method for diagnosis of blood brain barrier permeability in a subject comprising:

detecting a first elevated level of S100 β in the blood of a patient, said first level of S100 β being indicative of blood brain barrier permeability without neuronal damage; and

identifying a second elevated level of S100 β in the blood of the patient, the second elevated level of S100 β having a value greater than said value of said first elevated level of S100 β .

45. (New) The method of claim 44, wherein said value of said second elevated level of S100 β is indicative of neuronal damage.

46. (New) The method of claim 44, wherein said value of said second elevated level of S100 β is greater than twice the value of said first elevated level of S100 β .

47. (New) The method of claim 46, where wherein said value of said second elevated level of S100 β is indicative of neuronal damage.

48. (New) The method of claim 44, wherein said value of said first elevated level of S100 β is in the range of about 0.12 ng/ml to 0.35 ng/ml.

49. (New) The method of claim 44, wherein said value of said second level of S100 β is in the range of about 0.35 ng/ml.

50. (New) The method of claim 44, wherein the first elevated level of S100 β is detected using an immunoassay.

51. (New) The method of claim 44, wherein the second elevated level of S100 β is detected using an immunoassay.

52. (New) The method of claim 50, wherein the immunoassay is an immunoprecipitation assay.

53. (New) The method of claim 51, wherein the immunoassay is an immunoprecipitation assay.

54. (New) The method of claim 44, further comprising detecting levels of NSE and GFAP.